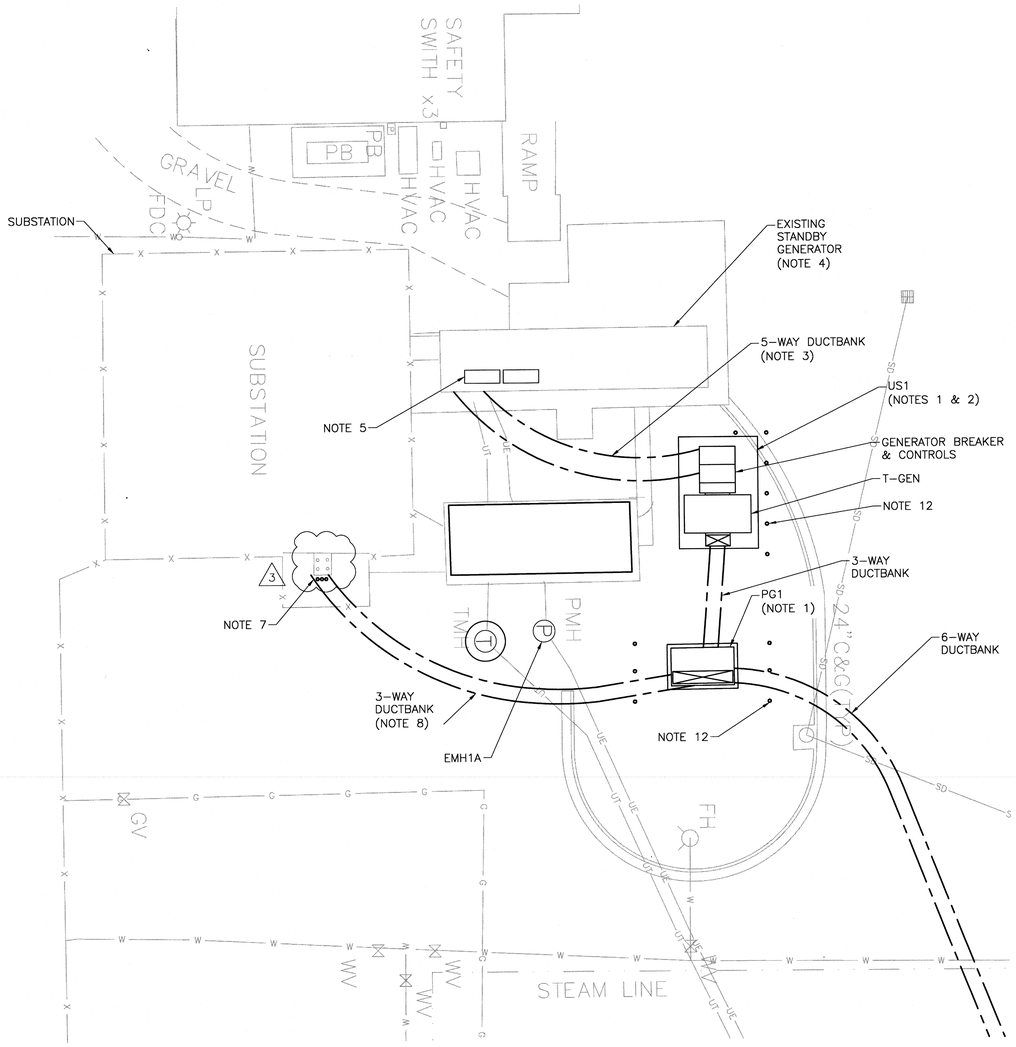
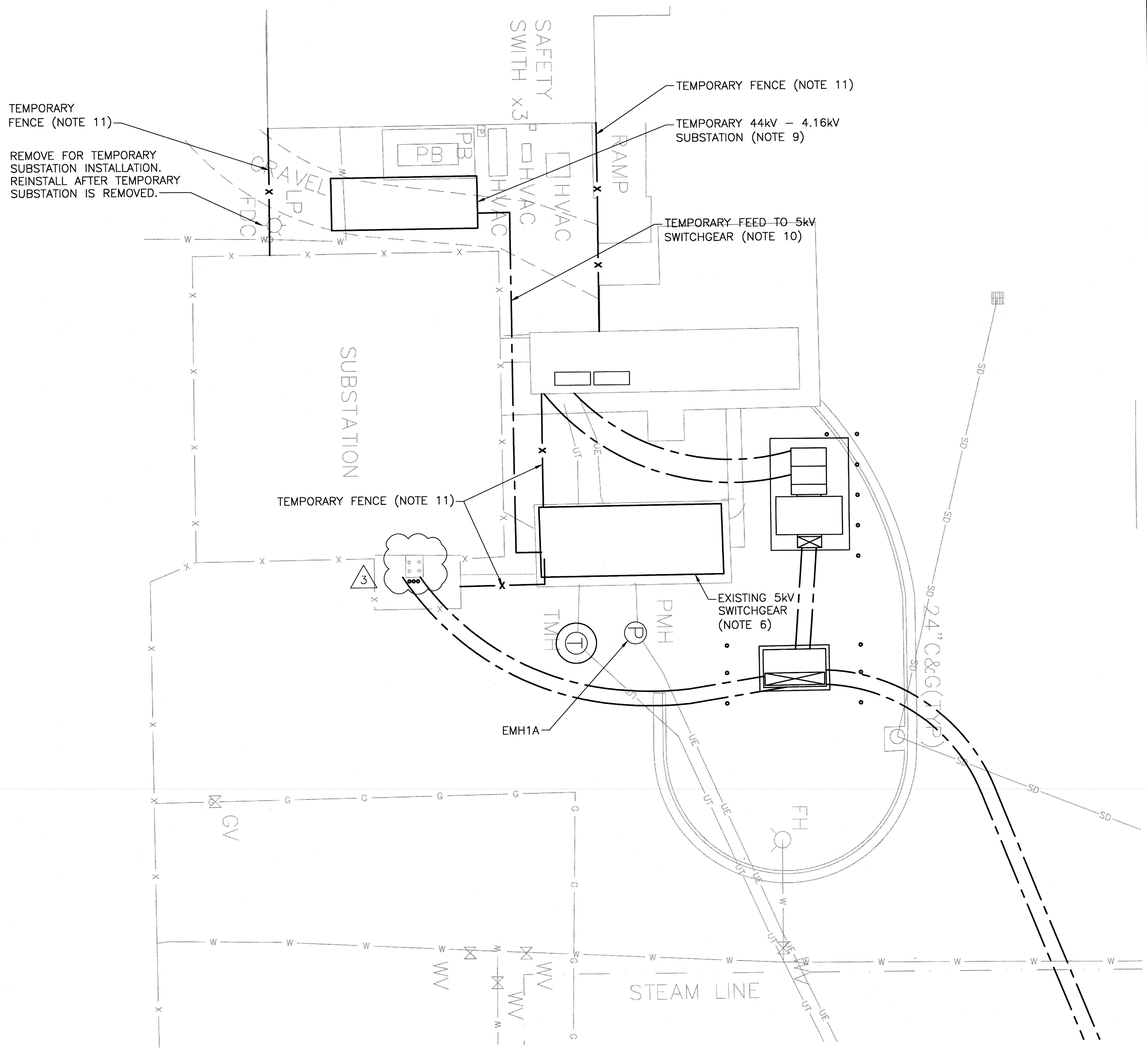


DD / ES101 **PARTIAL PLAN - TRANSFORMER T-GEN**
SCALE: 1" = 10'



DD / ES101 **PARTIAL PLAN - TEMPORARY 4160V**
SCALE: 1" = 10'

NOTES:

1. PROVIDE CONCRETE PAD AND MOUNT IN LOCATION SHOWN FOR THE INSTALLATION OF NEW UNIT SUBSTATION AND SWITCH.
2. PROVIDE UNIT SUBSTATION WITH RATINGS AS INDICATED ON "OVERALL SINGLE LINE DIAGRAM."
3. DUCT BANK CONSISTS OF TWO 5" PVC CONCRETE ENCASED DUCTS FOR ROUTING MEDIUM VOLTAGE CABLE AND THREE 3" RIGID METAL CONDUITS FOR ROUTING CONTROL CABLE.
4. EXISTING POWER AND CONTROL CABLE BETWEEN THE EXISTING STANDBY GENERATOR AND THE EXISTING 5kV SWITCHGEAR TO BE REMOVED. EXISTING STUB-UPS FOR THE CONDUIT THAT GOES BETWEEN THE EXISTING 5kV SWITCHGEAR TO BE CUT TO GRADE AND FILLED IN ON THE STANDBY GENERATOR SIDE. NEW POWER CABLE AS DEFINED ON THE "OVERALL SINGLE LINE DIAGRAM" AND NEW CONTROL CABLE TO BE INSTALLED BETWEEN THE EXISTING STANDBY GENERATOR AND THE UNIT SUBSTATION "US1".
5. PROVIDE TWO NEW PULL BOXES SIZED PER THE NEC. ONE BOX TO BE UTILIZED FOR NEW MEDIUM VOLTAGE POWER CABLE. THE OTHER TO BE UTILIZED FOR NEW CONTROL CABLE.
6. EXISTING 5kV SWITCHGEAR, PAD AND ALL ASSOCIATED FEEDERS TO BE REMOVED AFTER ALL LOOPS HAVE BEEN PHASED OVER TO 12470V SYSTEM.
7. BUILD DUCT BANK BETWEEN "PG1" AND DUKE ENERGY SUBSTATION INTERCONNECTION POINT IN ADVANCE OF THE SUBSTATION UPGRADE. DUKE ENERGY TO REPLACE THE EXISTING INTERCONNECTION STRUCTURE AND POLE MOUNTED SWITCHES. TURN CONDUITS UP AT OLD STRUCTURE FOR CONTINUATION ON NEW STRUCTURE. CONTRACTOR TO PULL NEW SERVICE CONDUCTORS AND TERMINATE ON THE NEW STRUCTURE.
8. ONE CONDUIT WITHIN THIS DUCT BANK IS RESERVED FOR FUTURE COMMUNICATION CABLES BETWEEN THE DUKE ENERGY SUBSTATION AND THE VA SYSTEMS.
9. TEMPORARY 44kV - 4.16kV SUBSTATION TO BE PROVIDED BY DUKE ENERGY. COST OF THE TEMPORARY SUBSTATION IS INCLUDED IN A SEPARATE CONTRACT BETWEEN THE VAMC AND DUKE ENERGY.
10. PROVIDE (2) SETS OF (3) 350kcmil 15KV RATED CABLE FOR THE TEMPORARY FEED FROM THE TEMPORARY UTILITY DELIVERY POINT TO THE EXISTING 5kV SWITCHGEAR. ROUTE CABLE FOR TEMPORARY FEED ABOVE GROUND IN (2) 5" SCHEDULE 80 CONDUITS. A NEW PENETRATION INTO THE BACK OR THE SIDE OF THE 5kV GEAR MAIN SECTION WILL BE REQUIRED. (3)
11. CONTRACTOR TO CONSTRUCT A TEMPORARY FENCE AROUND TEMPORARY SUBSTATION AND THE CABLE FEEDING THE 5kV SWITCHGEAR.
12. PROVIDE BOLLARDS AROUND OUTDOOR ELECTRICAL EQUIPMENT NEAR ROADWAYS. SEE "CONCRETE POST BOLLARD DETAIL." BOLLARDS SHALL BE PLACED SO THAT THEY DO NOT IMPEDE ACCESS TO, OR WORKING SPACE AROUND ANY ENCLOSURE OPENING.
13. REFER TO DETAIL ON DWG E-502 FOR GROUNDING REQUIREMENTS AT PAD-MOUNTED SWITCHGEAR INSTALLATIONS.

IF THIS DRAWING IS A REDUCTION, GRAPHIC SCALE MUST BE USED.

10' 0 10'

3	REVISED FOR ADDENDUM	4/9/2015
2	ISSUED FOR CONSTRUCTION DOCUMENTS	2/27/2015
1	ISSUED FOR CONSTRUCTION DOCUMENTS	2/4/2015
0	100% DESIGN SUBMITTAL	7/18/2014
	Revisions	Date

ISSUED FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL SEAL 041592 ENGINEER MATTHEW R. KLEBSCH 4/4/2015

Approved: Energy Engineer | Approved: Safety Manager | Approved: Service Chief

Approved: Infection Control Officer | Approved: Chief of Staff

Approved: GEMS Coordinator | Approved: Associate Director

Approved: Chief of Engineering Svc. | Approved: Medical Center Director

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Drawing Title: **PARTIAL PLANS 9**

Project Title: **CORRECT HIGH-VOLTAGE ELECTRICAL DEFICIENCIES**

Location: VAMC SALISBURY, NC

Building Number | Checked: CBR | Drawn: TFB | Revision: 3

Date: 2/4/2015

Project No.: 659-13-102

DRAWING NO.: **E-409**

Dwg. 43 OF 58

Veterans Affairs